Effective Practices for Teaching Academic Vocabulary

What is Academic Vocabulary?

Academic vocabulary is the vocabulary that appears frequently across academic disciplines, but rarely occurs in oral conversation. Academic vocabulary is critical to understanding the concepts of the content taught in schools. Academic vocabulary exposes students to word origins, multiple meanings of words, and references to abstract concepts that relate and connect directly to targeted content areas.

A Model for Comprehensive Vocabulary Development

Wide Reading

- There is a significant gap in the vocabulary knowledge that some students bring to text and that gap widens as students progress through the grades. One cannot teach students all of the words they need to learn; therefore, vocabulary instruction includes indirect instruction methods, such as wide reading, that exposes students to lots of new words through multiple opportunities to read a wide variety of texts.

- Students who lack adequate vocabulary have difficulty getting meaning from what they read, so they read less because they find reading difficult. This impact is often referred to as the Matthew Effect because limited exposure to printed words results in fewer opportunities to acquire background knowledge, an understanding of academic language, and knowledge of specific word meanings (Cunningham & Stanovich, 1998).

- Wide reading is one strategy to address this word gap. Students learn new words by encountering them in text, either through their own reading or by being read to. For example, in order to gain access and ownership to academic vocabulary, some students may need the support of assistive technology such as print-to-speech devices, audio books, or Braille.

Direct Teaching of Important Individual Words

- Although it is impossible to specifically teach all of the new words students must learn each year (between 2,000 to 3,000), it is useful to provide direct instruction in some words. This includes pre-teaching key vocabulary prior to reading a selection. It is estimated that students can be taught explicitly some 400 words per year in school (Beck, McKewon & Kucan, 2002). Teachers must remember that direct instruction of specific words is only one component of effective vocabulary instruction. (See Figure 1)

- Once specific words are chosen, the vocabulary instruction must be analytical and substantial for words to "really stick" (Juel & Deffes, 2004). Teachers must provide clear explanations and examples of the meanings of these words in various contexts, and provide students with opportunities to discuss, analyze, and use the words.
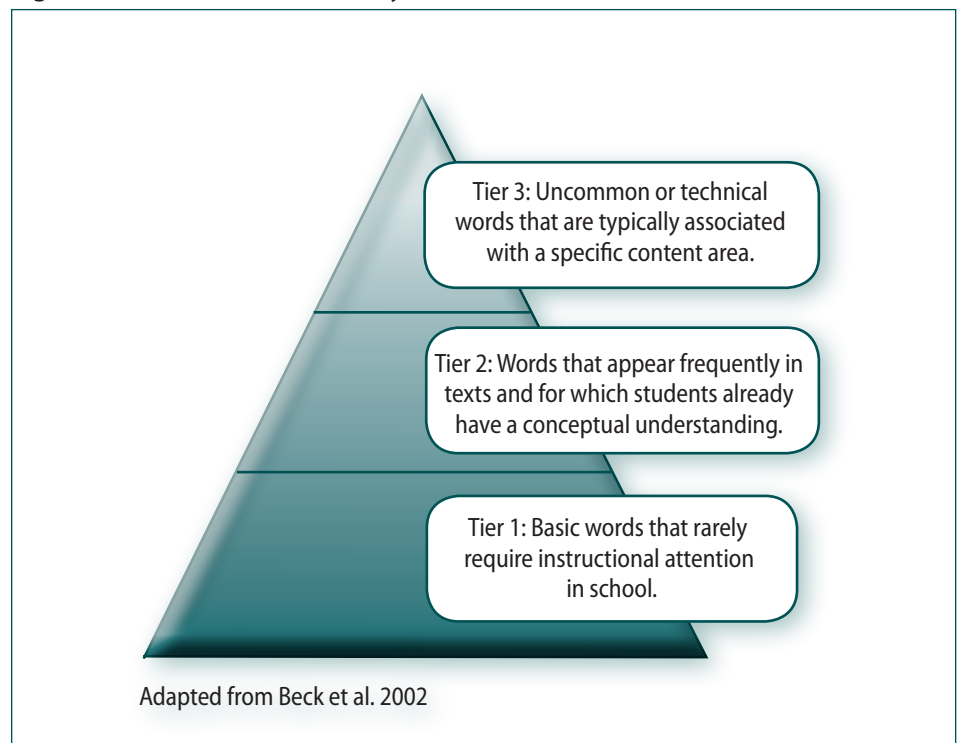
Considering Morphology

- Structural analysis of a word draws the student's attention to the individual units of meaning in the word, also known as morphemes. When students encounter unknown words, they can use knowledge of word parts (root words, suffixes and prefixes) to help determine the meaning. This is especially true when reading content textbooks because these texts often contain many words that are derived from the same word parts. For example, the Greek root "bio" (meaning "life, living organisms") reappears again and again in a typical middle school life science textbook (e.g., biology, biologist, biosphere, biodegradable, biochemical, biofuel, biohazard) (Sedita, 2005).

The Need for Academic Vocabulary (Research)

Helping students build a rich understanding of words is crucial; therefore, students must be exposed to and taught academic vocabulary using evidence-based practices such as wide reading, direct instruction, and morphological awareness. The research literature on academic vocabulary instruction reveals the following with implications for instructional practice:

- Academic vocabulary has been shown to be a critical element in reading comprehension and academic achievement. Vocabulary accounts for over half of the impact of all factors that influence reading comprehension (Stahl & Nagy, 2006).

- Students' word knowledge is strongly linked to academic success because students who have large vocabularies can understand new ideas and concepts and build connections between ideas (Sedita, 2005).

- The high correlation in the research literature of word knowledge with reading comprehension indicates that if students do not adequately and steadily grow their vocabulary knowledge, reading comprehension will be affected (Chall & Jacobs, 2003).

- The lack of frequent and systematic instruction of academic vocabulary as its focus is a primary cause of the achievement gap (The Aspen Institute, 2012).

Figure 1. Words to Teach Directly

Tier 3: Uncommon or technical words that are typically associated with a specific content area.

Tier 2: Words that appear frequently in texts and for which students already have a conceptual understanding.

Tier 1: Basic words that rarely require instructional attention in school.

Adapted from Beck et al. 2002

- Morphology is widely held to be part of the explanation for how children learn so many words that they were never explicitly taught (Anglin, 1993; Carlisle & Fleming, 2003; Carlisle, 2007).

- Nagy & Anderson (1984) and Taft & Kougious (2004) estimated that about 60 percent of the novel words students encounter in texts could be worked out through problem solving morphological structure and their use in a sentence.

Scientifically Evidence-Based Instructional Sequence for Teaching Academic Vocabulary

There are a number of processes you can use to help students learn academic vocabulary. A few of those processes are highlighted below (See also Figure 2).

Guiding Instruction of Academic Vocabulary

1. Provide a description, an explanation, and an example of the new term.

2. Ask students to restate the description, explanation, or example in their own words.

3. Ask students to construct a picture, symbol, or graphic representing the term.

4. Engage students periodically in activities that help them add to their knowledge of the term in their notebooks.

5. Periodically ask students to discuss the terms with one another.

6. Involve students periodically in games that allow them to play with terms.

(*Building Academic Vocabulary,* Marzano and Pickering, 2005)

Figure 2. Instructional Routine for Teaching Critical, Unknown Vocabulary Words

Steps	Procedures	Examples
1	**Introduce the word.** • Write the word on the board. • Read the word and have the students repeat the word. • Have the students tap out the syllables in the word. • Have the students read the word by parts as you loop under the word. • Have the students repeat the pronunciation of the word. (If the words are difficult to pronounce or are unfamiliar, have the students repeat the word a number of times.)	• "This word is suffrage. What Word?" **Suffrage** • "Tap and say the parts of the word. **Suf frage**" • "Read the word by parts. **Suf frage**" • "What word? **Suffrage**" • "Suffrage is a noun."
2	**Introduce the meaning of the word.** Option 1: Present a student-friendly explanation. • Tell the students the explanation, or • Have the students read the explanation with you. Option 2: Have the students locate the definition in the glossary or text and break the definition into the critical attributes. Option 3: Introduce the word using the meaningful parts in the word.	1) When someone has suffrage, they have the right to vote in an election. 2) Glossary: Suffrage - the right to vote Suffrage - the right - to vote 3) Autobiography: auto = self, bio = life, graph = letters, words, or pictures
3	**Illustrate the word with examples.** • Concrete examples (e.g., objects, acting out) • Visual representations • Verbal examples	• When the United States was founded, only white men with property had **suffrage**. • At the time of the American Civil War, most white men had been granted **suffrage**. • In 1920, women were granted **suffrage**. The passage of the Nineteenth Amendment gave women the right to vote in all United States elections.
4	**Check the students' understanding.** Option 1: Ask deep processing questions. Option 2: Have the students discern between examples and nonexamples. Option 3: Have the students generate their own examples. Option 4: Sentence starter [or possibly: Provide a sentence starter and have the students complete the sentence.]	1) Say or write, "Suffrage is a critical aspect of democracy for the following reasons." Then have the students list the reasons why. 2) Tell me suffrage or not suffrage: The right to run for elected office. **Not Suffrage**. Why not? The right to vote. **Suffrage**. Why? 3) Make a list of the ways that **suffrage** could be limited or compromised.

Adapted from Western Regional Reading First Technical Assistance Center and Dr. Anita Archer.

Effective and Efficient Vocabulary Instructional Routine

(See also Figure 2.)

1. Pronounce – Guide the students in correctly pronouncing the word. Engage all students in saying the word together two or three times.

2. Explain – Use language familiar to the students and provide a clear meaning of the word. If possible, provide a synonym or known phrase to solidify the connection between the new vocabulary term and students' prior knowledge.

3. Provide Examples – Draw from a variety of contexts, not only the one used in the reading or lesson. Students will usually need at least two or three examples of a new term to firmly grasp the meaning.

4. Elaborate – Provide learners with an opportunity to elaborate word meanings by generating their own additional examples and visual representations.

5. Assess – Incorporate regular informal vocabulary assessment into the instructional process. Assessment of vocabulary involves both formative, quick informal checking for understanding during the lesson, and summative evaluation in the form of quiz or test.

Narrowing the Language Gap: The Case for Explicit Vocabulary Instruction (Feldman and Kinsella, 2005).

Visit the PaTTAN website at www.pattan.net to find resources for Academic Vocabulary Instruction and tools and tips for teachers.

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